

REMARKS

I. STATUS OF THE CLAIMS

Claims 21-52 are pending in this application. Claims 21, 24, and 47-52 have been amended to more particularly point out and distinctly claim the present invention. The amendments are supported by the specification (see, e.g., Specification at pages 2-4) and the claims as-filed. Accordingly, no new matter has been added by these amendments, nor do these amendments raise new issues or necessitate the undertaking of any additional search of the art by the Examiner.

II. REJECTION OF CLAIMS 21-52 UNDER 35 U.S.C. § 112, FIRST PARAGRAPH

The Examiner maintains her rejection of claims 21-52 under 35 U.S.C. § 112, first paragraph. The Examiner asserts that the present application "fails to describe specific examples of adhesive polymers that satisfy the criteria of claims 21-26." Final Office Action dated June 30, 2004, at 3. Specifically, the Examiner takes issue with the description in the specification, in which, she incorrectly alleges, "[t]here is no structure given to this polymer except for the trademark name." *Id.* The Examiner's position is that the functional language in the claims is not sufficient (*i.e.*, without further description of the polymers) such that "one of ordinary skill in the art could not recognize or understand the polymers that satisfy the requirement from the mere recitation of the function." *Id.*

As an initial matter, Applicants respectfully submit that this rejection is improper, and traverse the rejection with respect to all claims for at least the following reasons.

Applicants respectfully remind the Examiner that she "has the initial burden of presenting by a preponderance of evidence why a person skilled in the art would not recognize in an applicant's disclosure a description of the invention defined by the

claims.” M.P.E.P. § 2163 (citing *In re Wertheim*, 541 F.2d 257, 262 (CCPA 1977)).

Here, the Examiner has not met her burden of proof because she has not shown that one of ordinary skill in the art would not have recognized Applicants’ possession of the claimed invention based on the description of the polymers’ properties.

In addition, Applicants respectfully disagree with the Examiner’s contention that examples 2-4 of U.S. Patent 5,543,488 (the ‘488 patent) (previously submitted as Exhibit A) “is not drawn to AQ 1350 polymer since the glass transition temperature is not same to that disclosed in the product Brochure.” Final Office Action dated June 30, 2004, at 5. Applicants submit herewith a Sales Specification from Eastman for AQ 1350 Copolyester, dated January 2001, which lists the glass transition temperature as 0°C +/- 10°C. Accordingly, -2°C, which is the glass transition temperature listed for AQ 1350 in the ‘488 patent is within the acceptable manufacturer’s range.

Regardless, focusing on the polymer alone is improper. Applicants have amended claim 21 to make it even more clear that the detachment force F_{max} is not a property of the adhesive polymer itself, but rather a property of the entire composition after it has been applied to hair and dried thereon. Thus, now it is abundantly clear that the adhesive polymer alone is not responsible for satisfying the claimed requirement of the specified detachment force F_{max} .

To satisfy the written description requirement, a specification must describe the claimed invention in sufficient detail that one skilled in the art can reasonably conclude that the inventor had “possession” of the claimed invention. See, e.g., *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1563 (Fed. Cir. 1991). “Possession” may be shown in a number of ways, including by describing an actual reduction to practice, or by describing distinguishing identifying characteristics sufficient to show that the applicant was in

possession of the claimed invention. See, e.g., *Pfaff v. Wells Elecs., Inc.*, 525 U.S. 55, 68 (1998).

Applicants contend that the detailed language of the present claims themselves is sufficient to demonstrate to one skilled in the art that Applicants had possession of the invention when the application was filed. The present claims recite a cosmetic hair composition that, when dried on the hair, has very specific properties that are easily understood by one skilled in the art. This is not mere “functional” language, as indicated by the Examiner, but a listing of particular physical properties of the composition. The recitation of such detail in both the specification and claims leaves no doubt in the mind of one skilled in the art that Applicants knew what they had invented and were in possession of it at the time of filing. Such detail is more than sufficient to meet the written description requirements of 35 U.S.C. § 112, first paragraph. Therefore, one skilled in the art would know what ingredients the claimed compositions would need to comprise.

Moreover, possession of the invention within the meaning of 35 U.S.C. § 112, first paragraph, may be demonstrated by the description of an actual reduction to practice. M.P.E.P. § 2163(l). In this case, Applicants have described an actual reduction to practice of the invention in Examples 1 and 4, found on pages 11 and 13, respectively, of the originally-filed specification. The compositions described in these examples exhibit the properties recited in the instant claims.

Thus, for at least the foregoing reasons, Applicants respectfully submit that the rejection of all claims under 35 U.S.C. § 112, first paragraph is in error and should be withdrawn.

III. REJECTION OF CLAIM 37 UNDER 35 U.S.C. § 112, FIRST PARAGRAPH

Claim 37 stands rejected under 35 U.S.C. § 112, first paragraph, for containing new subject matter, “which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.” Final Office Action dated June 30, 2004, at 6. Specifically, the Examiner contends that there is no support at page 10, 2nd paragraph of the specification for the recitation of “ketones, alkyl acetates, and di-alkoxy substituted alkanes,” in claim 37. *Id.* The Examiner argues that “[d]escription for two specific compounds in each category [i.e., ketones, alkyl acetates, and di-alkoxy substituted alkanes] is not a support for the entire genus.” *Id.* Further, the Examiner rejects Applicants’ previous argument that the recitation of at least two species can be representative of a genus.

Applicants continue to respectfully disagree with the Examiner and traverse for at least the following reasons.

First, Applicants continue to respectfully assert that the written description requirement for claims to a genus may be met by the disclosure of a representative number of species within that genus. M.P.E.P. § 2163.05(I). What constitutes a “representative number of species” within a particular genus is dependent on the types of compounds being claimed and their disclosed use. *Id.* In some cases, recitation of a single species has been held to be an adequate description of an entire genus. See *In re Rasmussen*, 650 F.2d 1212, 211 USPQ 323 (CCPA 1981); and *In re Herschler*, 591 F.2d 693, 200 USPQ 711 (CCPA 1979). Furthermore, the Examiner is not recognizing that the specification paragraph in question uses language that is clearly permissive and non-restrictive to describe the organic solvents that may be used.

Second, proper written description support does not require the language of the claim to be set forth “*in haec verba*” in the specification. *In re Wright*, 866 F.2d 422, 425 (Fed. Cir. 1989). The Examiner is improperly looking to the scope of the phrase of the specification, rather than considering whether the disclosure of the specification supports claim 37. As we have previously argued, with respect to organic solvents, the recitation of at least two species contained within each genus, combined with the permissive language of the description, provides plenty of support for one of ordinary skill in the art to recognize that the inventors had possession of the claimed subject matter.

Therefore, for at least the foregoing reasons, Applicants respectfully submit that the rejection of claim 37 under 35 U.S.C. § 112, first paragraph is improper and should be withdrawn.

IV. REJECTION OF CLAIMS 21-38 AND 42 UNDER 35 U.S.C. § 102(B)

Claims 21-23, 25-26, 28-38, and 42 stand rejected under 35 U.S.C. § 102(b) as anticipated in view of U.S. Pat. No. 5,053, 221 to Robertson et al (“Robertson”). In particular, the Examiner states:

See col.2, lines 30-45 for the beads which read on the claimed particles. There is overlap of concentration and particle size. See the paragraph bridging col.s 3-4 for the adhesive polymer and see col.4, lines 18 et seq and col.5, lines 1-60 for the AQ polymers. The polymer disclosed in the patent reads on the claimed adhesive polymer. See the examples for ethanol which read on the solvent, see col5, lines 60 et seq and col.6 for the additives.

Office Action at 6.

Applicants respectfully disagree with the Examiner and traverse the rejection for at least the following reasons.

A claim is anticipated under 35 U.S.C. § 102(b) only if each and every element as set forth in the claim is found in a single reference. See *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987) and M.P.E.P. § 2131. Furthermore, the identical invention must be set forth in as complete detail as it appears in the claim. See *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236 (Fed. Cir. 1989) and M.P.E.P. § 2131. Robertson cannot be said to anticipate the present invention because it does not disclose each and every element of the present claims.

Specifically, there is no teaching or disclosure in Robertson that the compositions disclosed therein would exhibit the claimed detachment profile. The Examiner attempts to make an inherency argument by stating that “[t]he office is not equipped to manufacture the composition and then drying the composition so that it satisfies the functional criteria of claims 21-26. Therefore the claims are anticipated, absence of the contrary.” Office Action at 6. However, such a statement by the Examiner does not qualify as a proper inherency argument under M.P.E.P. § 2112. (“Examiner must provide rationale or evidence tending to show inherency”). “Inherency . . . may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.” *In re Roberson*, 169 F.3d 743, 745 (Fed. Cir. 1999) (citations omitted).

Therefore, for at least the foregoing reasons, Applicants respectfully submit that the rejection of claims 21-23, 25-26, 28-38, and 42 under 35 U.S.C. § 102(b) is improper and should be withdrawn.

V. **CONCLUSION**

In view of the foregoing amendments and remarks, Applicants respectfully request the reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.

Dated: May 25, 2005

By: Deborah M. Herzfeld
Deborah M. Herzfeld
Reg. No. 52,211



SALES SPECIFICATION

FOR	SPECIFICATION NO.	18009-3
"EASTMAN AQ" 1350 Copolyester	NUMBER OF PAGES	1
	EFFECTIVE DATE	January, 2001

A. GENERAL

A-1. This specification describes a grade of polymer that must meet all of the requirements listed in Section B when tested as directed by the referenced methods.

B. PROPERTIES AND TEST METHODS

B-1. Viscosity, 25,000 to 50,000 ASTM D3236
Brookfield 177°C, cp

B-2. Color, Gardner 4 Maximum ASTM D1544

B-3. Glass Transition 0 +/- 10 TEPO-A-AN-G-DTP-5-S11
Temperature (Tg), °C

EASTMAN

For reasons of safety and accuracy, the person performing methods described herein must be thoroughly trained and under the supervision of a professional person who is knowledgeable in the relevant science. Equipment and materials described should be used in accordance with safety precautions recommended by their manufacturers.

Eastman Chemical Company
Kingsport, Tennessee 37662

EASTMAN

**EASTMAN AQ 1350 Copolyester
Product Data Sheet**

Property^a	Test^b Method	Typical Value, Units^c
Viscosity, Brookfield @ 177°C		35000 cP
Color, Gardner ^d		4 max.
Ring and Ball Softening Point	E 28	105°C
Penetration Hardness		30 dmm
Glass Transition Temperature (T _g)		-5°C
Elongation		1660%

^aUnless noted otherwise, all tests are run at 23°C (73°F) and 50% relative humidity.

^bUnless noted otherwise, the test method is ASTM.

^cUnits are in SI or US customary units.

^dMolten

Comments

Properties reported here are typical of average lots. Eastman makes no representation that the material in any particular shipment will conform exactly to the values given.

Eastman Chemical Company and its marketing affiliates shall not be responsible for the use of this information, or of any product, method, or apparatus mentioned, and you must make your own determination of its suitability and completeness for your own use, for the protection of the environment, and for the health and safety of your employees and purchasers of your products. No warranty is made of the merchantability or fitness of any product, and nothing herein waives any of the Seller's conditions of sale.

8-May-2001 1:13 PM

Eastman

<03 MATERIAL SAFETY DATA SHEET

Revision Date: 08/23/2001

MSDSUSA/ANSI/EN/150000011930/Version 2.1

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name	"EASTMAN AQ" 1350 Copolyester
Product Identification Number(s)	AQ 1350, P18547F9, P18009F3, P1800902, P18009F2, P18009F4, P18009FA, P18009FC, P18009FT, P18009FZ, P18009F8, P18009F5, P18009FB, E1800901, P18009F6
Manufacturer/Supplier	Eastman Chemical Company, Kingsport, Tennessee 37662
MSDS Prepared by	Eastman Product Safety and Stewardship
Chemical Name	not applicable
Synonym(s)	165245
Molecular Formula	not applicable
Molecular Weight	not applicable
Product Use	adhesive
OSHA Status	nonhazardous

For emergency health, safety & environmental information, call 800-EASTMAN.

For emergency transportation information, call CHEMTREC at 800-424-9300 or call 800-EASTMAN.

2. COMPOSITION INFORMATION ON INGREDIENTS

(Typical composition is given, and it may vary. A certificate of analysis can be provided.)

<u>Weight %</u>	<u>Component</u>	<u>CAS Registry No.</u>
100%	proprietary copolyester	not assigned

3. HAZARDS IDENTIFICATION

CAUTION!
MOLTEN MATERIAL WILL PRODUCE THERMAL BURNS

HMIS® Hazard Ratings: Health - 1, Flammability -1, Chemical Reactivity - 0

NOTE: HMIS® rating involves data interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this MSDS must be considered.

4. FIRST-AID MEASURES

Inhalation: If symptomatic, move to fresh air. Get medical attention if symptoms persist.

Eyes: If molten material contacts the eye, immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention immediately.

Skin: If burned by contact with molten material, cool as quickly as possible. Do not peel material from skin. Get medical attention.

Ingestion: Seek medical advice.

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Note to Physicians: Burns should be treated as thermal burns. The material will come off as healing occurs; therefore, immediate removal from the skin is not necessary.

5. FIRE FIGHTING MEASURES

Extinguishing Media: water spray, dry chemical

Special Fire-Fighting Procedures: Wear self-contained breathing apparatus and protective clothing.

Hazardous Combustion Products: carbon dioxide, carbon monoxide, oxides of sulfur, oxides of sodium

Unusual Fire and Explosion Hazards: Powdered material may form explosive dust-air mixtures.

6. ACCIDENTAL RELEASE MEASURES

Sweep up and place in a container for chemical waste.

7. HANDLING AND STORAGE

Personal Precautionary Measures: Avoid contact with molten material.

Prevention of Fire and Explosion: Keep from contact with oxidizing materials. Minimize dust generation and accumulation. In the United States of America, refer to NFPA® Pamphlet No. 654, "Prevention of Fire and Dust Explosions in the Chemical, Dye, Pharmaceutical, and Plastics Industries."

Storage: Keep container closed.

Additional Information: Store in a cool, dry place out of direct sunlight.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Country specific exposure limits have not been established or are not applicable unless listed below.

Ventilation: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. Supplementary local exhaust ventilation, closed systems, or respiratory protection may be needed in special circumstances such as poorly ventilated spaces, mechanical generation of dusts, heating, drying, etc.

Respiratory Protection: If engineering controls do not maintain airborne concentrations to an acceptable level, an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 63 FR 1152, January 8, 1998. Respirator type: dust, organic vapor

Eye Protection: It is a good industrial hygiene practice to minimize eye contact. Wear a face shield when working with molten material.

Skin Protection: When material is heated, wear gloves to protect against thermal burns.

Recommended Decontamination Facilities: eye bath, washing facilities

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Form: solid

Color: yellow

Odor: sweet

Specific Gravity: > 1

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<03 MATERIAL SAFETY DATA SHEET

Revision Date: 08/23/2001

MSDSUSA/ANSI/EN/150000011930/Version 2.1

Softening Point: 90 °C

Solubility in Water: negligible (dispersible)

Flash Point: not applicable, combustible solid

Thermal Decomposition Temperature: Thermal stability not tested. Low stability hazard expected at normal operating temperatures.

10. STABILITY AND REACTIVITY

Stability: Not fully evaluated., Materials containing similar structural groups are normally stable.

Incompatibility: Material reacts with strong oxidizing agents.

Hazardous Polymerization: will not occur

11. TOXICOLOGICAL INFORMATION

Toxicity data are not available unless listed below.

12. ECOLOGICAL INFORMATION

This material has not been tested for environmental effects.

13. DISPOSAL CONSIDERATIONS

Discharge, treatment, or disposal may be subject to national, state, or local laws. Incinerate.

14. TRANSPORT INFORMATION

Marine pollutant components: none unless listed below

DOT (USA): Class not regulated

ICAO Status: Class not regulated

IMDG Status: Class not regulated

15. REGULATORY INFORMATION

WHMIS (Canada) Status: noncontrolled

SARA 313: none, unless listed below

Carcinogenicity Classification (components present at 0.1% or more): none, unless listed below

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<03 MATERIAL SAFETY DATA SHEET

Revision Date: 08/23/2001

MSDSUSA/ANSI/EN/150000011930/Version 2.1

TSCA (US Toxic Substances Control Act): This product is listed on the TSCA inventory. Any impurities present in this product are exempt from listing.

DSL (Canadian Domestic Substances List) and CEPA (Canadian Environmental Protection Act): This product is listed on the DSL or otherwise complies with CEPA new substance notification requirements.

EINECS (European Inventory of Existing Commercial Chemical Substances): All components of this product are listed on EINECS. Any polymer intentionally present in this product has regulatory clearance under Directives of the European Union.

AICS / NICNAS (Australian Inventory of Chemical Substances and National Industrial Chemicals Notification and Assessment Scheme): This product is listed on AICS or otherwise complies with NICNAS.

MITI (Japanese Handbook of Existing and New Chemical Substances): This product is not listed in the Handbook. In Japan, its use is restricted to research and development purposes only.

ECL (Korean Toxic Substances Control Act): This product is listed on the Korean inventory or otherwise complies with the Korean Toxic Substances Control Act.

16. OTHER INFORMATION

For other information, call your Eastman representative or the Eastman operator at 423-229-2000 (USA).

The information contained herein is based on current knowledge and experience; no responsibility is accepted that the information is sufficient or correct in all cases. Users should consider these data only as a supplement to other information. Users should make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials, the safety and health of employees and customers, and the protection of the environment.

Eastman AQ Polyesters

Water-Dispersible Hot Melt Adhesive Raw Materials

EASTMAN

- Introduction
- Product Function
- Incorporation Into Adhesive Formulations
- Key Benefits
- Physical Properties
- Applications
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- Figures 1-2
- List of Suppliers
- Printable Brochure

Physical Properties

Table 1

Typical Properties of Water-Dispersible Adhesive Raw Material Sulfopolyesters

Typical Properties	AQ 1045	AQ 1350	AQ 1950
Structure	Branched	Branched	Branched
Odor	Slight	Slight	Slight
Brookfield thermosel viscosity ^a @ 177°C, cP	4,500	35,000	95,000
RBSP, °C	85	105	115
T _g (DSC), °C	-5	-2	3
Gardner color (molten), max.	4	4	4
Hydroxyl number	47	51	57

^aBrookfield thermosel viscosity RVDV-1+, 12 g of each sample conditioned at 90°C for 16 h in a vacuum oven prior to testing.

Typical Properties	AQ 14000	AQ 2150	AQ 2350
Structure	Branched	Linear	Linear
Odor	Slight	None	None
Brookfield thermosel viscosity ^a @ 177°C, cP	400,000	15,000	39,000
RBSP, °C	133	80	92
T _g (DSC), °C	7	9	11
Gardner color (molten), max.	4	5	5
Hydroxyl number	51	16	12

^aBrookfield thermosel viscosity RVDV-1+, 12 g of each sample conditioned at 90°C for 16 h in a vacuum oven prior to testing.

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